

In the Specification:

Please amend the Abstract as follows:

A holographic sensor is provided. The sensor can include a medium and a hologram disposed throughout the volume of the medium, wherein an optical characteristic of the hologram changes as a result of a variation of a physical property of the medium, and wherein the hologram is formed as a non-planar mirror. An apparatus for detecting an analyte can include the sensor and a unit of optical fibers for transmitting light to and from the hologram.